AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

Claims 1-46 (Canceled).

Claim 47 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 8, which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 48 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence of SEQ ID NO. 9, which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 49 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 2, which is covalently

linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 50 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence of SEQ ID NO. 3, which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 51 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 8, which is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 52 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry, ~~The method of claim 43, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence of SEQ ID NO. 9 which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the

administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 53 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 2, which is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 54 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence of SEQ ID NO. 3, which is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 55 (Previously presented): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide comprising the amino acid sequence of SEQ ID NO. 3 which is of 80-100% purity, covalently linked to at least one polyethylene glycol (PEG) molecule, and has an extended half-life of at least 3 days.

Claim 56 (Previously presented): The method of claim 55, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.